

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

WIRTGEN AMERICA, INC.,

Plaintiff,

v.

CATERPILLAR, INC.,

Defendant.

Case No. 1:17-cv-00770-JDW-MPT

MEMORANDUM

Economists love assumptions. One joke recites that a physicist, a chemist, and an economist find themselves on a desert island with a single can of food. The physicist offers to calculate the force needed to use a coconut to open the can. The chemist offers to make a solution that will eat through the can's top. The economist tells them they are making it too complicated and just to assume a can opener.

The world of patent damages is filled with economic assumptions, including that the infringer and patent holder sat down and negotiated a license just before the infringement began. To construct that hypothetical negotiation, a damages expert must assume that each side participated willingly in the negotiation. But some participants are more willing than others. In this case, Wirtgen America, Inc. held patents on features that gave it a competitive advantage over one of its primary competitors, Caterpillar, Inc. It

didn't license those patents to Caterpillar in real life, and it presumably would not have wanted to license them in the world of a hypothetical negotiation, either.

When Dr. Pallavi Seth constructed a hypothetical negotiation to calculate those damages, she placed a great deal of emphasis on Wirtgen's reluctance to enter into a license agreement with its competitor. Too much emphasis, as it turns out. Because in constructing the hypothetical negotiation, Dr. Seth assumed that Wirtgen wouldn't enter into a license with Caterpillar unless it received at least all of the profits it would lose from lost machine sales. That assumption holds true regardless of the value of those technologies or circumstances that might have made Caterpillar less willing to license some patents than others.

Federal Circuit law does not allow Dr. Seth to make that assumption, however. She had to apportion her damages to account for non-infringing elements of the cold planers at issue. Her failure to do so means that I must exclude her damages analysis.

I. BACKGROUND¹

A. The Patented Technologies

Wirtgen asserts nearly 20 claims across 7 patents. The patents relate broadly to road construction equipment—primarily cold planers—but they cover a range of different

¹ I write this opinion for the benefit of the Parties. Given their familiarity with the underlying dispute and its procedural history, I recount here only the circumstances necessary to resolve this Motion.

features. The '309 Patent² discloses road building machines that can adjust the machine's height relative to the frame or chassis. The '530 Patent³ discloses a road construction machine with a drum, adjustable ground supports, and lifting sensors. The '972 Patent⁴ discloses similar features. The '641 Patent⁵ makes disclosures about a method for working ground surfaces with a milling drum, including raising the drum off the ground. The '788 Patent⁶ discloses a road construction machine that is height-adjustable for milling depth or slope. The '474 Patent⁷ covers similar subject matter and shares a similar specification. The '268 Patent⁸ discloses aspects of the drive train in a road construction machine.

B. Dr. Seth's Analysis

Wirtgen submits Dr. Seth as its damages expert. Dr. Seth estimated a reasonable royalty that Caterpillar would have paid to Wirtgen if Wirtgen and Caterpillar had engaged in a hypothetical negotiation on the eve of the first alleged infringement. Dr. Seth cites to evidence showing that Wirtgen would be reluctant to license to Caterpillar, even under very favorable license terms. For example, Wirtgen has never licensed its patents to Caterpillar in the past.

² U.S. Patent No. 7,828,309

³ U.S. Patent No. 9,656,530

⁴ U.S. Patent No. 8,424,972

⁵ U.S. Patent No. 7,530,641

⁶ U.S. Patent No. 7,946,788

⁷ U.S. Patent No. 8,690,474

⁸ U.S. Patent No. RE48,268.

Nevertheless, using a willing licensor/willing licensee framework, Dr. Seth estimated the highest amount that would ensure Caterpillar found the agreement profitable (otherwise known as Caterpillar's maximum willingness to pay or "MWP") and the lowest amount that would ensure Wirtgen found the agreement profitable (Wirtgen's minimum willingness to accept or "MWA"). Dr. Seth defines Caterpillar's MWP as "the anticipated incremental profits earned from practicing the Asserted Patents," and Wirtgen's MWA as "the profits it anticipates to lose should Caterpillar practice the Asserted Patents." (D.I. 213-1 ¶ 17.) The difference between those Wirtgen's MWA and Caterpillar's MWP equals the "joint surplus value." (*Id.* ¶ 18.)

Wirtgen's MWA is its lost profits due to infringement. Those lost profits represent "both potential machine sales and spare and replacement parts sales associated with those machines that Wirtgen would have had the opportunity to make itself if not for Caterpillar's alleged infringement of the Asserted Patents." (D.I. 213-1 ¶ 17 n.11.)

Dr. Seth opines that the joint surplus value "may not relate entirely to the Asserted Patents," so she apportions the joint surplus value "to isolate the incremental value contributions of the Asserted Patents to the accused products." (*Id.*; *see also id.* ¶¶ 204-06, 241-42.) She apportions the joint surplus value using an apportionment rate based on a count of family-level forward patent citations. She then splits the apportioned joint surplus value between the parties using the Rubenstein bargaining model. Finally, she arrives at her damages calculation by adding Wirtgen's split of the apportioned joint

surplus value to Wirtgen's MWA. Stated as a percentage of her total damages figure, Wirtgen's MWA accounts for roughly 95%.

According to Dr. Seth, the method for determining Wirtgen's MWA would not change depending on which patents the jury finds Caterpillar infringed. (The actual amount of the MWA might change because different patents were in effect at different times.) During her deposition, she acknowledged that she "did not conduct any patent-by-patent apportionment" with respect to her calculation of the MWA. (D.I. 213-2 at 108-09.)

C. Procedural History

Caterpillar filed a motion to exclude Dr. Seth's testimony. On February 1, 2024, I held a hearing with counsel for the Parties concerning the potential exclusion of Dr. Seth's testimony. At that hearing, I ruled that Dr. Seth's reasonable royalty analysis was deficient and noted that I would memorialize the reasons for that decision in writing. This opinion provides that reasoning.

II. LEGAL STANDARD

Regional circuit law governs aspects of expert opinion admissibility unless the issues are unique to patent law. *See Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1390 (Fed. Cir. 2003). Federal Rule of Evidence 702 provides that a qualified expert may testify in the form of an opinion if: "(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in

issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.” FED. R. EVID. 702. Rule 702’s requirements establish “three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit.” *Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d Cir. 2000); *see also Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993).

“A patent owner, having prevailed on liability, may receive a reasonable royalty or lost profits, but not both for the same infringing units.” *Asetek Danmark A/S v. CMI USA Inc.*, 852 F.3d 1352, 1362 (Fed. Cir. 2017). A standard, but non-exclusive, way of determining lost profits is utilizing the four-factor test articulated in *Panduit Corp. v. Stahl Bros. Fibre Works*, 575 F.2d 1152, 1156 (6th Cir. 1978). A reasonable royalty, on the other hand, is often “based upon a hypothetical negotiation between the patentee and the infringer when the infringement began.” *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995). Most analyses of a reasonable royalty utilize the fifteen-factor test set out in *Georgia-Pacific Corp. v. United States Plywood Corp.* *See id.* at 517 n.7. (citing 318 F. Supp. 1116, 1120 (S.D.N.Y.1970), *modified and aff’d*, 446 F.2d 295 (2d Cir.), *cert. denied*, 404 U.S. 870, 92 S.Ct. 105, 30 L.Ed.2d 114 (1971)). A hypothetical negotiation “necessarily involves an element of approximation and uncertainty.” *Id.* Nonetheless, “given the great financial incentive parties have to exploit the inherent imprecision in patent valuation, courts must be proactive to ensure that the testimony presented—using

whatever methodology—is sufficiently reliable to support a damages award.” *Commonwealth Sci. & Indus. Rsch. Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015).

Apportionment requires that “a patentee must take care to seek only those damages attributable to the infringing features.” *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014). The Federal Circuit requires that “to be admissible, all expert damages opinions must separate the value of the allegedly infringing features from the value of all other features.” *Commonwealth Sci. & Indus. Rsch. Organisation*, 809 F.3d at 1301 (citation omitted) (explaining that apportionment is the governing rule where multi-component products are involved). So, an expert’s failure to properly apportion damages justifies exclusion of that expert’s testimony at trial. *See LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 69 (Fed. Cir. 2012); *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed. Cir. 2011).

The entire market value rule “is a narrow exception” to the rule of apportionment. *LaserDynamics, Inc.*, 694 F.3d at 67. “If it can be shown that the patented feature drives the demand for an entire multi-component product, a patentee may be awarded damages as a percentage of revenues or profits attributable to the entire product.” *Id.*

Wirtgen, as the party offering Dr. Seth’s testimony, bears the burden of proving that her testimony meets Rule 702’s restrictions. *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d

717, 744 (3d Cir. 1994). Further, as the patentee, Wirtgen bears the ultimate burden of proving damages. *See Uniloc USA, Inc.*, 632 F.3d at 1315.

III. ANALYSIS

Dr. Seth didn't properly apportion her reasonable royalty, even though the law requires her to do so. In simplified terms, her royalty payment sums two figures: Wirtgen's MWA; and the joint surplus value. But Dr. Seth apportioned *only* the joint surplus value. That is, she didn't apportion Wirtgen's MWA/lost profits. In other words, Dr. Seth premises Wirtgen's lost profits on sales of *entire machines* and not the value that a specific patent added to that machine. Thus, she sets a whopping 95% of her damages figure in a way that includes the value of all the other features in the machines. Because Dr. Seth doesn't invoke the entire market value rule, that's impermissible.

In her reasonable royalty calculation, Dr. Seth was permitted to "consider the profits on sales [Wirtgen] might lose as a result of granting a license." *Asetek Danmark A/S*, 852 F.3d at 1362 (citing *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554–55 (Fed. Cir. 1995) (*en banc*)). As a general matter, lost profits might even predominate an ultimate reasonable royalty figure. *See id.*; *see also FloodBreak, LLC v. Art Metal Indus., LLC*, No. 3:18-CV-503 (SRU), 2020 WL 6060974, at *16 (D. Conn. Oct. 13, 2020) (allowing a damages expert who "weighed lost profits more heavily than other factors in her hypothetical negotiation" to testify at trial); *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 794328, at *22 (N.D. Cal. Feb. 25, 2014) (same). That framework might be

particularly relevant in a case like this one where the licensor would have been reluctant to make a deal. But Dr. Seth's lost profits are problematic because that figure fails to isolate the value of the allegedly infringing features from the value of all other features. *See VirnetX, Inc.*, 767 F.3d at 1329. It is Dr. Seth's use of *unapportioned* lost profits wherein the issue lies.

Dr. Seth's apportionment approach is out of step even when compared to the cases Wirtgen cites. The Federal Circuit has acknowledged that certain methodologies themselves can build in apportionment. *See Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1288 (Fed. Cir. 2017) (proper analysis of *Panduit* factors may account for apportionment); *Vectura Ltd. v. Glaxosmithkline LLC*, 981 F.3d 1030, 1041 (Fed. Cir. 2020) (comparable licenses and negotiations). When a damages expert walks through the *Panduit* factors in determining a lost profit analysis, and then inputs that analysis into her reasonable royalty rate calculation, she might take care of apportionment too. *See, e.g., FloodBreak, LLC*, 2020 WL 6060974, at *5. An analysis of licenses to comparable technology might also do the trick. *See, e.g., Plexxikon Inc. v. Novartis Pharms. Corp.*, No. 4:17-CV-04405-HSG, 2021 WL 97544, at *5 (N.D. Cal. Jan. 12, 2021).

But Dr. Seth doesn't use the *Panduit* factors to arrive at her lost profits number. She also can't rely on a comparable license because Wirtgen hasn't licensed these patents before. To be clear, it's okay that she didn't use the *Panduit* factors or comparable licenses. But, in the absence of doing either, she had to find another adequate way to apportion

her damage award in light of the facts of this case. *See Commonwealth Sci. & Indus. Rsch. Organisation*, 809 F.3d at 1301.

She attempts to meet that requirement in her analysis of *Georgia-Pacific's* Factor 13, but it's inadequate. *See generally AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1338 (Fed. Cir. 2015); *Bd. of Regents Univ. of Texas Sys. v. Bos. Sci. Corp.*, 645 F. Supp.3d 324, 330 (D. Del. 2022). On one hand, Dr. Seth acknowledges the rule of apportionment in that analysis. She notes that "[t]he Accused Product as a whole incorporates value from other patents, know-how, human capital, and raw materials, in addition to the value contributed by the technology embodied by the Asserted Patents." (*See* D.I. 213-11 ¶ 195.) She then passingly suggests that the sales data she relied on already accounts for apportionment. (*See id.*) But, without a more fulsome analysis, it's unclear how machine sales data could possibly do that. Wirtgen's counsel could not answer that question at the hearing. The fact that Dr. Seth mentioned apportionment in talking about the thirteenth *Georgia-Pacific* factor doesn't mean that she apportioned her damages properly, and it doesn't make her analysis admissible. *See, e.g., NNCrystal US Corp. v. Nanosys, Inc.*, No. CV 19-1307-RGA, 2023 WL 2891453, at *3 (D. Del. Apr. 11, 2023).

One example from the hearing demonstrates some of the problems with Dr. Seth's analysis. Around the time of the hypothetical negotiation, Caterpillar analyzed several of Wirtgen's patents to determine how they impacted Caterpillar in the marketplace. For some, Caterpillar concluded that it had no workaround and its inability to provide the

patented technology substantially harmed its market position. But for the '309 Patent, Caterpillar determined that it could design a workaround in a few months and at a relatively low cost. (Hearing Tr. at 66-67.) By assuming that Wirtgen's MWA would be its lost profits, and then setting that as a damages floor, Dr. Seth fails to account for the fact that the '309 Patent—as one example—was less valuable to Caterpillar. Apportionment would have corrected that flaw.

During the hearing, Wirtgen's counsel defended Dr. Seth's work by arguing that she conducted a hypothetical negotiation of Wirtgen's patent portfolio. (Hearing Tr. at 61-62.) The problem with that approach, though, is that the portfolio contains unrelated patents covering different features of the machines. And the hypothetical negotiation would only have included those patents that the jury finds infringed, not the whole portfolio. Dr. Seth's approach therefore leaves open the possibility of awarding damages for features that the jury finds not to be infringing.

A failure to apportion goes to admissibility, not weight. If Wirtgen prevails on liability, it will be entitled only to a damage award which captures "the value of what was taken" meaning the patented technology. *See Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014). As the Federal Circuit has explained, "care must be taken to avoid misleading the jury by placing undue emphasis on the value of the entire product." *Commonwealth Sci. & Indus. Rsch. Organisation*, 809 F.3d at 1302. Under these

circumstances, I find that since 95% of Dr. Seth's damages figure is unapportioned lost profits, admission risks "skew[ing] the damages horizon for the jury." *Id.*

At the conclusion of the hearing, Wirtgen suggested that Dr. Seth may still be able to testify. (*See* Hearing Tr. at 70:13-23.) I haven't been supplied with her revised expert report, nor have I been able to parse the excerpts of the expert report I have to determine the merits of this request. Therefore, I am not ruling out the possibility that Dr. Seth may be able to testify on matters not at-issue in this opinion, but I'm not blessing it, either.

IV. CONCLUSION

Dr. Seth assumes that Wirtgen would have been a reluctant licensor. While reasonable, that assumption leads her to award to Wirtgen all of its lost profits, and then some, without determining if any particular patented technology justified such a recovery. Because she fails to apportion to ensure that Wirtgen would receive only the benefit of its patented technologies in her damages analysis, Dr. Seth's analysis runs afoul of governing Federal Circuit precedent and requires exclusion. To the extent that Wirtgen believes that there are parts of Dr. Seth's opinion that survive this analysis, it may disclose the testimony that it proposes to Caterpillar in short order, and I will resolve any remaining disputes at the final pretrial conference. An appropriate Order follows.

BY THE COURT:

/s/ Joshua D. Wolson

JOSHUA D. WOLSON, J.

February 5, 2024